

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 **Claim 1 (currently amended):** A radio communications
2 apparatus having a transmission power control feature for
3 controlling the transmission power of said apparatus by
4 using a transmission power control bit transmitted from a
5 distant station to the apparatus, said apparatus
6 comprising:

7 a communication state detector which detects a
8 communication state based on the reception power of a
9 received signal transmitted from the distant station to
10 said apparatus; and

11 a transmission power control step range changer which
12 ~~varies the~~ calculates a variable power step amount of a
13 transmission power control step ~~corresponding to~~ based on
14 the transmission power control bit and also based on the
15 detected communication state, wherein

16 said apparatus increases or decreases a transmission
17 power of a transmitted signal to the distant station by the
18 ~~varied~~ calculated power step amount in response to the
19 transmission power control bit received from the distant
20 station.

1 **Claim 2 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a reception power change detector which
4 detects a change in reception power in a local station.

1 **Claim 3 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a distant station transmission power
4 change detector which detects a change in transmission
5 power in a distant station.

1 **Claim 4 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a control state detector which detects
4 the control state of the local station.

1 **Claim 5 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a local station transmission power
4 change detector which detects a change in transmission
5 power in the local station.

1 **Claim 6 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a transmission power control bit change

4 detector which detects a change in said transmission power
5 control bit.

1 **Claim 7 (original):** The radio communications
2 apparatus according to claim 2, wherein said reception
3 power change detector has a reception power comparator
4 which compares a previous reception power with a current
5 reception power.

1 **Claim 8 (original):** The radio communications
2 apparatus according to claim 2, wherein said reception
3 power change detector has a fading pitch detector which
4 detects the fading pitch of reception power.

1 **Claim 9 (original):** The radio communications
2 apparatus according to claim 2, wherein said reception
3 power change detector has a reception power threshold
4 comparator which compares the reception power with a
5 predetermined threshold.

1 **Claim 10 (currently amended):** A transmission power
2 control method for a radio communications apparatus for
3 controlling transmission power of the apparatus by using a
4 transmission power control bit transmitted from a distant
5 station to the apparatus, said method comprising:

6 the apparatus having a communication state detecting
7 step which detects a communication state based on the
8 reception power of a received signal transmitted from the
9 distant station; ~~and~~

10 the apparatus having a transmission power control step
11 range changing step which ~~varies the~~ calculates a variable
12 power step amount of a transmission power control step
13 ~~corresponding to~~ based on the [[a]] transmission power
14 control bit[[,]] received by the apparatus from the distant
15 station[[,]] and also based on the detected communication
16 state; and

17 said apparatus increasing or decreasing a transmission
18 power of a transmitted signal to the distant station by the
19 ~~varied~~ calculated power step amount in response to the
20 transmission power control bit.

1 **Claim 11 (currently amended):** The transmission power
2 control method for radio communications apparatus according
3 to claim 10, wherein said communication state detecting
4 step has a reception power change detecting step which
5 detects a change in reception power in a local station,
6 wherein said transmission power control range changing step
7 ~~changes~~ calculates the variable power step amount
8 ~~transmission power control range~~ depending on the detected
9 change in reception power.

1 **Claim 12 (currently amended):** The transmission power
2 control method for radio communications apparatus according
3 to claim 10, wherein

4 said communication state detecting step has a distant
5 station transmission power change detecting step which
6 detects a change in transmission power in a distant station
7 and a reception power change detecting step which detects
8 a change in reception power in a local station, wherein

9 said transmission power control step range changing
10 step ~~varies~~ calculates the power step amount of the
11 transmission power control step ~~range~~ depending on the
12 detected change in transmission power in the distant
13 station and the detected change in reception power in the
14 local station.

1 **Claim 13 (currently amended):** The transmission power
2 control method for radio communications apparatus according
3 to claim 10, wherein

4 said communication state detecting step has a control
5 state detecting step which detects the control state of a
6 local station, wherein

7 said transmission power control step range changing
8 step ~~varies~~ calculates the power step amount of the
9 transmission power control step range depending on the
10 detected control state.

1 **Claim 14 (currently amended):** A transmission power
2 control method for radio communications apparatus according
3 to claim 10, wherein

4 said communication state detecting step has a local
5 station transmission power change detecting step which
6 detects a change in transmission power in a local station
7 and a transmission power control bit change detecting step
8 which detects a change in the transmission power control
9 bit, wherein

10 said transmission power control step range changing
11 step ~~varies~~ calculates the power step amount of the
12 transmission power control step ~~range~~ depending on the
13 detected change in transmission power in the local station
14 and the detected change in the transmission power control
15 bit.

1 **Claim 15 (original):** The transmission power control
2 method for radio communications apparatus according to
3 claim 11 or 12, wherein

4 said reception power change detecting step has a
5 reception power comparing step which compares a previous
6 reception power with a current reception power, wherein

7 a change in reception power is detected based on the
8 comparison results of the reception power comparing step.

1 **Claim 16 (original):** The transmission power control
2 method for radio communications apparatus according to
3 claim 11 or 12, wherein
4 said reception power change detecting step has a
5 fading pitch detecting step which detects the fading pitch
6 of reception power, wherein
7 a change in reception power is detected based on the
8 detected fading pitch.

1 **Claim 17 (original):** The transmission power control
2 method for radio communications apparatus according to
3 claim 11 or 12, wherein
4 said reception power change detecting step has a
5 reception power comparing step which compares a previous
6 reception power with a current reception power and a fading
7 pitch detecting step for detecting the fading pitch of
8 reception power, wherein
9 a change in reception power is detected based on the
10 comparison results of the reception power comparing step
11 and the detected fading pitch.

1 **Claim 18 (original):** A transmission power control
2 method for radio communications apparatus according to
3 claim 11 or 12, wherein

4 said reception power change detecting step has a
5 reception power threshold comparing step for compares the
6 reception power with a predetermined threshold, wherein
7 a change in reception power is detected based on the
8 comparison results of the reception power threshold
9 comparing step.

1 **Claim 19 (previously presented):** A computer-readable
2 recording medium for storing a program for use by a
3 computer for executing the transmission power control
4 method for the radio communications apparatus according to
5 any one of claims 10 through 14.

1 **Claim 20 (new):** A transmission power control method
2 for controlling a transmission power of a signal
3 transmitted from a portable mobile device to a base
4 station, said method comprising the steps of:

5 detecting information about the reception power of a
6 signal transmitted from the base station to the mobile
7 device as received by the mobile device;

8 calculating a variable power step amount based on both
9 a transmission power control bit received by the mobile
10 device from the distant station and the detected
11 information; and

12 changing a transmission power of a transmitted signal
13 from the mobile device to the distant station by the
14 calculated power step amount.